Complete Summary

GUIDELINE TITLE

Prevention and control of tuberculosis in correctional and detention facilities: recommendations from CDC.

BIBLIOGRAPHIC SOURCE(S)

Centers for Disease Control and Prevention (CDC), National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Prevention and control of tuberculosis in correctional and detention facilities: recommendations from CDC. MMWR Recomm Rep 2006 Jul 7;55(RR-9):1-44. [172 references] PubMed

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Centers for Disease Control and Prevention, Advisory Council for the Elimination of Tuberculosis. Prevention and control of tuberculosis in correctional facilities. MMWR Recomm Rep 1997 Jun 7;45(RR-8):1-27.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

- Tuberculosis (TB)
- Latent TB infection (LTBI)

GUIDELINE CATEGORY

Diagnosis
Prevention
Screening
Treatment

CLINICAL SPECIALTY

Infectious Diseases
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Nurses
Physician Assistants
Physicians
Public Health Departments

GUIDELINE OBJECTIVE(S)

- To provide a framework and general guidelines for effective prevention and control of tuberculosis (TB) in jails, prisons, and other correctional and detention facilities
- To expand on, update, and supersede recommendations issued by the Advisory Council for the Elimination of TB (ACET) in 1996

TARGET POPULATION

Inmates and employees of both short- and long-term correctional facilities

INTERVENTIONS AND PRACTICES CONSIDERED

Tuberculosis (TB) Infection Control Activities in Correctional Facilities

Screening and Diagnosis

1. Symptom screening
2. Chest-radiograph
3. The Mantoux tuberculin skin-test (TST)
4. QuantiFERON-TB Gold Test
5. Evaluation of clinical presentation
6. Acid-fast bacilli (AFB) stained sputum smears
7. Culture for Mycobacterium tuberculosis

Prevention and Control

1. Preventive pharmacotherapy using isoniazid given under direct observation
2. Isolation of persons suspected of having infectious tuberculosis
3. Contact investigation
4. Case reporting

5. Airborne infection isolation
6. Environmental controls
7. Personal respiratory protection
8. Training and education of correctional workers and detainees in prevention measures

Treatment/Management

1. Pharmacotherapy: isoniazid, rifampin (or rifabutin), pyrazinamide, and ethambutol or all given under direct observation (directly observed therapy [DOT])
2. Discharge planning

MAJOR OUTCOMES CONSIDERED

- Prevention of tuberculosis transmission
- Patient adherence to treatment regiment

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

To update the existing guidelines, with assistance from the Advisory Council for the Elimination of Tuberculosis (ACET), the Centers for Disease Control and Prevention (CDC) organized and convened the Tuberculosis in Corrections Working Group, an ad hoc group of persons with expertise in public health and health care in correctional facilities. Organizations represented in the Working Group included ACET, the National Commission on Correctional Health Care, the American Correctional Association, the American Jail Association, and the Society of Correctional Physicians. The Working Group reviewed published guidelines and recommendations, published and unpublished policies and protocols, and peer-reviewed studies discussing overall tuberculosis (TB) prevention and control and aspects of TB prevention and control specific to correctional and detention facilities. These guidelines, recommendations, policies, protocols, and studies form the basis for the Working Group's recommendations. Because controlled trials are lacking for TB prevention and control activities and interventions specific to correctional and detention facilities, the recommendations have not been rated on the quality and quantity of the evidence. The recommendations reflect the expert opinion of the Working Group members with regard to best practices, based on their experience and their review of literature.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Summary of Changes from Previous Recommendations

These guidelines are intended for short- and long-term confinement facilities (e.g., prisons, jails, and juvenile detention centers), which are typically referred to as correctional facilities throughout this report. These recommendations differ as follows from those made in 1996:

- The target audience has been broadened to include persons working in jails and other detention facilities.
- The need for correctional and detention facilities to base screening procedures for inmates and detainees on assessment of their risk for tuberculosis (TB) is emphasized. A description of how TB risk should be assessed is included.
- The need for institutions to conduct a review of symptoms of TB for all inmates and detainees at entry is discussed.
- The need for all inmates and detainees with suspected TB to be placed in airborne infection isolation (AII) immediately is emphasized.
- Testing recommendations have been updated to reflect the development of the QuantiFERON®-TB Gold test (QFT-G), a new version of the QuantiFERON®-TB (QFT) diagnostic test for Mycobacterium tuberculosis infection.
- The section on environmental controls has been expanded to cover local exhaust ventilation, general ventilation, air cleaning, and implementation of an environmental control program. Ventilation recommendations for selected areas in new or renovated correctional facilities have been included.
- A section on respiratory protection has been added, including information on implementing respiratory protection programs.
- Treatment recommendations for TB and latent tuberculosis infection (LTBI) have been updated on the basis of the most recent treatment statements published by Center for Disease Control (CDC), the American Thoracic Society (ATS), and the Infectious Diseases Society of America.
- Emphasis is placed on case management of inmates with TB disease and LTBI.
- The need for early discharge planning coordinated with local public health staff is emphasized.
- A section has been included on U.S. Immigration and Customs Enforcement detainees.
- The importance of collaboration between correctional facility and public health staff is emphasized, particularly with respect to discharge planning and contact investigation.
- The need for corrections staff to work closely with public health staff to tailor an appropriately comprehensive training program to achieve and sustain TB control in a correctional facility is emphasized.
- The need for public health workers to receive education regarding the correctional environment is emphasized.
- Program evaluation is emphasized. Recommended areas of evaluation include assessment of TB risk in the facility, performance measurement for quality improvement, collaboration, information infrastructure, and using evaluation information to improve the TB-control program.

Summary of Recommendations

Screening

Early identification and successful treatment of persons with TB disease remains the most effective means of preventing disease transmission. Inmates who are likely to have infectious TB should be identified and begin treatment before they are released into the general population. Screening programs in the correctional setting also allow for the detection of substantial numbers of persons with LTBI who are at high risk for TB disease and would likely benefit from a course of treatment.

The type of screening recommended for a particular correctional facility is determined by an assessment of the risk for TB transmission within that facility. The risk assessment should be performed annually and should be conducted in collaboration with the local or state health department. A facility's TB risk level can be defined as minimal or nonminimal. A facility should be classified as having minimal TB risk on the basis of four criteria:

- No cases of infectious TB have occurred in the facility in the last year.
- The facility does not house substantial numbers of inmates with risk factors for TB (e.g., HIV infection and injection-drug use).
- The facility does not house substantial numbers of new immigrants (i.e., persons arriving in the United States within the previous 5 years) from areas of the world with high rates of TB.
- Employees of the facility are not otherwise at risk for TB.

Any facility that does not meet all of these criteria should be categorized as being a nonminimal TB risk facility.

Inmates in all minimal TB risk correctional and detention facilities require an evaluation at entry for symptoms of TB. Persons with symptoms of TB require an immediate evaluation to rule out the presence of infectious disease and must be kept in an AII room until they are evaluated. All newly arrived inmates should be evaluated for clinical conditions and other factors that increase the risk for TB disease. Persons who have any of these conditions require further screening with a TST, a QFT-G, or a chest radiograph within 7 days of arrival. Regardless of TST or QFT-G result, inmates known to have HIV infection or other severe immunosuppression, as well as inmates who are at risk for HIV infection but whose HIV status is unknown, should have a chest radiograph taken as part of the initial screening. Persons who have an abnormal chest radiograph should be evaluated further to rule out TB disease; if TB disease is excluded as a diagnosis, LTBI therapy should be considered if the TST or QFT-G is positive.

In nonminimal TB risk prisons, symptom screening assessment should be performed immediately for all new inmates. Any inmate who has symptoms suggestive of TB should be placed in an AII room and evaluated promptly for TB disease. Inmates who have no symptoms require further screening with a TST, a QFT-G, or a chest radiograph within 7 days of arrival. Regardless of their TST or QFT-G status, inmates known to have HIV infection or other severe immunosuppression, and inmates who are at risk for HIV infection but whose HIV status is unknown, should have a chest radiograph taken as part of the initial screening. Persons who have an abnormal chest radiograph should be evaluated further to rule out TB disease; if TB disease is excluded as a diagnosis, LTBI therapy should be considered if the TST or QFT-G result is positive.

Symptom screening should be performed immediately on entry for all new detainees in nonminimal TB risk jails. Any detainee who has symptoms suggestive of TB should be placed in an AII room and promptly evaluated for TB disease. Detainees who are without symptoms require further screening with a TST, a QFT-G, or a chest radiograph within 7 days of arrival. Regardless of TST or QFT-G result, detainees known to have HIV infection, and detainees who are at risk for HIV infection but whose HIV status is unknown, should have a chest radiograph taken as part of the initial screening. Persons who have a positive result should be further evaluated to rule out TB disease. Screening in jails with the TST or QFT-G for purposes of initiating LTBI therapy often is not practical because of the high rate of turnover and short lengths of stay.

A medical history relating to TB should be obtained from and recorded for all new employees at the time of hiring, and a physical examination for TB disease should be required. In addition, TST or QFT-G screening should be mandatory for all employees who do not have a documented positive result. Persons who have a positive TST or QFT-G result should have a chest radiograph taken and interpreted and should be required to have a thorough medical evaluation; if TB disease is excluded as a diagnosis, such persons should be considered for LTBI therapy. All employees should be informed and instructed to seek appropriate follow-up and screening for TB if they are immunosuppressed for any reason (e.g., HIV infection, organ transplant recipient receiving immunosuppressive therapy, and treatment with tumor necrosis factor [TNF]-alpha antagonist). Any employee who has symptoms suggestive of TB should not return to the workplace until a clinician has excluded a diagnosis of contagious TB disease.

In general, long-term inmates and all employees who have a negative baseline TST or QFT-G result should have follow-up testing at least annually. Persons who have a history of a positive test result should be screened annually for symptoms of TB disease. Annual chest radiographs are unnecessary for the follow-up evaluation of infected persons. Test results should be recorded in medical records and in a retrievable aggregate database of all TST or QFT-G results.

Case Reporting

Correctional facility medical staff must report any suspected or confirmed TB cases among inmates or employees to the appropriate health agency in accordance with state and local laws and regulations, even if the inmate or detainee has already been released or transferred from the facility. Reporting cases to health departments benefits the correctional facility by allowing it to obtain health department resources for case management and contact investigation in both the facility and the community. In addition, drug-susceptibility results should be used to inform optimal therapy and sent to the state or local health department for use in monitoring the rates of drug resistance. The drug-susceptibility reports also should be sent to all health departments managing contacts of the TB case because the choice of medication for LTBI treatment is based on drug- susceptibility test results of the source case. Reports to local or state health departments should identify the agency that has custodial responsibility for the inmate.

Airborne Infection Isolation

TB airborne precautions should be initiated for any patient who 1) has signs or symptoms of TB disease or 2) has documented TB disease and has not completed treatment or not previously been determined to be non-infectious. For patients placed in an AII room because of suspected infectious TB disease of the lungs, airways, or larynx, airborne precautions can be discontinued when infectious TB disease is considered unlikely and either 1) another diagnosis is made that explains the clinical syndrome or 2) the patient has three negative AFB sputum-smear results. Incarcerated patients in whom the suspicion of TB disease remains after the collection of three negative acid-fast bacilli (AFB) sputum-smear results should not be released from an AII room until they are on standard multidrug anti-TB treatment and are clinically improving. A patient who has drug-susceptible TB of the lung, airways, or larynx; who is on standard multidrug anti-TB treatment; and who has had a clinical and bacteriologic response to therapy is probably no longer infectious. However, because culture and drug-susceptibility results typically are not known when the decision to discontinue airborne precautions is made, all patients in whom the probability of TB disease is high should remain in an AII room while incarcerated until they have 1) had three consecutive negative AFB sputum smear results, 2) received standard multidrug anti-TB treatment, and 3) demonstrated clinical improvement.

Environmental Controls

Environmental controls should be implemented when the risk for TB transmission persists despite efforts to screen and treat infected inmates. Environmental controls are used to remove, inactivate, or kill M. tuberculosis in areas in which the organism could be transmitted. Primary environmental controls consist of controlling the source of infection by using local exhaust ventilation (e.g., hoods, tents, or booths) and diluting and removing contaminated air using general ventilation. Secondary environmental controls consist of controlling the airflow to prevent contamination of air in areas adjacent to the source (AII rooms) and cleaning the air using high efficiency particulate air (HEPA) filtration and/or ultraviolet germicidal irradiation (UVGI). The efficiency of different primary or secondary environmental controls varies. A detailed discussion concerning the application of environmental controls has been published previously.

Personal Respiratory Protection

Respiratory protection is used when administrative (i.e., identification and isolation of infectious TB patients) and environmental controls alone have not reduced the risk for infection with M. tuberculosis to an acceptable level. The use of respiratory protection might be most appropriate in specific settings and situations within correctional facilities; for example, protection is warranted for inmates and facility staff when they enter AII rooms, transport infectious inmates in an enclosed vehicle, and perform or participate in cough-inducing procedures. In correctional facilities, a Centers for Disease Control and Prevention (CDC)/National Institute for Occupational Safety and Health (NIOSH)-approved N95 air-purifying respirator will provide adequate respiratory protection in the majority of situations that require the use of respirators.

All correctional facility staff members who use respirators for protection against infection with M. tuberculosis must participate in the facility's respiratory protection program (e.g., understand their responsibilities, receive training,

receive medical clearance, and engage in fit testing). All facilities should develop, implement, and maintain a respiratory-protection program for health-care workers or other staff who use respiratory protection. (Respiratory-protection programs are required for facilities covered by Occupational Safety and Health Administration [OSHA]). In addition to staff members, visitors to inmates with TB disease should be given respirators to wear while in AII rooms and instructed how to ensure their own respiratory protection by checking their respirator for a proper seal. Each facility, regardless of TB risk classification (i.e., minimal or nonminimal), should develop a policy on the use of respirators by visitors of patients.

Diagnosis and Treatment of LTBI and TB Disease

A diagnosis of TB disease should be considered for any patient who has a persistent cough (≥3 weeks) or other signs or symptoms compatible with TB disease (e.g., bloody sputum [hemoptysis], night sweats, weight loss, anorexia, and fever). Diagnostic tests for TB include the TST, QFT-G, chest radiography, and laboratory examination of sputum samples or other body tissues and fluids. Persons exposed to inmates with TB disease might become infected with LTBI, depending on host immunity and the degree and duration of exposure. Therefore, the treatment of persons with TB disease plays a key role in TB control by stopping transmission and preventing potentially infectious cases from developing. LTBI is an asymptomatic condition that can be diagnosed by the TST or QFT-G.

Regardless of age, correctional facility staff and inmates in the following high-risk groups should be given treatment for LTBI if their reaction to the TST is ≥5 mm:

- HIV-infected persons
- Recent contacts of a TB patient
- Persons with fibrotic changes on chest radiograph consistent with previous TB disease
- Patients with organ transplants and other immuno-compromising conditions who receive the equivalent of ≥15 mg/day of prednisone for ≥1 month.

All other correctional facility staff and inmates should be considered for treatment of LTBI if their TST result is ≥10 mm induration. The preferred treatment for LTBI is 9 months of daily isoniazid or biweekly dosing administered by directly observed therapy (DOT). Although LTBI treatment regimens are broadly applicable, modifications should be considered for certain populations (e.g., patients with HIV infection) and when drug resistance is suspected.

Individualized case management should be provided for all patients with TB disease. In addition, patient management should be coordinated with officials of the local or state health department. Regimens for treating TB disease must contain multiple drugs to which the organisms are susceptible. For the majority of patients, the preferred regimen for treating TB disease consists of an initial 2-month phase of isoniazid, rifampin, pyrazinamide, and ethambutol, followed by a continuation phase of isoniazid and rifampin lasting •4 months, for a minimum total treatment period of 6 months. The decision to stop therapy should be based on the number of doses taken within a maximum period (not simply a 6-month period). Persons with cavitary pulmonary TB disease and positive cultures of sputum specimens at the completion of 2 months of therapy should receive a

longer, 7-month continuation phase of therapy (total duration: 9 months) because of the substantially higher rate of relapse among persons with this type of TB disease.

Drug-susceptibility testing should be performed on all initial M. tuberculosis isolates from patients with TB disease. When results from drug-susceptibility tests become available, the treatment regimen should be adjusted accordingly. Medical providers treating patients with drug-resistant TB disease should seek expert consultation and collaborate with the local health department for treatment decisions.

TB treatment regimens might need to be altered for HIV-infected persons who are receiving antiretroviral therapy. Whenever possible, the care of persons with concomitant TB and HIV should be provided by or in consultation with experts in the management of both TB and HIV-related disease.

The primary determinant of treatment outcome is patient adherence to the drug regimen. Thus, careful attention should be paid to measures designed to enable and foster adherence. DOT is the preferred treatment strategy for all persons with TB disease and high-risk (e.g., HIV infected) persons with LTBI. DOT should be used throughout the entire course of therapy whenever feasible. Practitioners providing treatment to inmates should coordinate DOT with the local health department on an inmate's release. The local health department also may be involved in monitoring therapy for correctional facility staff.

Discharge Planning

Post-release follow-up is a necessary component of TB control efforts. Effective discharge planning requires collaboration between corrections and medical staff (both intra- and interfacility), as well as with public health and community-based service organizations.

To ensure uninterrupted treatment, discharge planning for inmates in whom TB disease is diagnosed must begin as soon as possible after diagnosis. Corrections or health service administrators (or their designees) should assign staff to notify the public health department of inmates receiving treatment for TB disease or LTBI. Inmates with TB disease should be interviewed while still incarcerated (ideally by public health staff) to enable facility administrators to assess and plan for the appropriate support and referrals that will be needed after discharge.

All correctional facilities should assign personnel (preferably health-care professionals) to serve as case managers. These managers should be responsible for conducting discharge planning in the facility, which entails coordinating follow-up and communicating treatment histories with public health department and other health-care counterparts within the community.

Contact Investigation

The overall goal of a TB contact investigation is to interrupt transmission of M. tuberculosis. Ongoing transmission is prevented by 1) identifying, isolating, and treating other persons with TB disease (e.g., secondary patients) and 2)

identifying infected contacts of the source and secondary patients and providing them with a complete course of treatment for LTBI.

Because decisions involved in planning and prioritizing contact investigations in correctional facilities are seldom simple, the process benefits from the input of a larger, multi-disciplinary team when possible. The best preparation for contact investigations in correctional facilities is ongoing, formal collaboration between correctional and public health officials.

The decision to initiate a contact investigation for an inmate or detainee with possible TB is made on a case-by-case basis. In general, contact investigations should be conducted in the following circumstances: 1) suspected or confirmed pulmonary, laryngeal, or pleural TB and cavitary disease on chest radiograph or positive AFB smear results (sputum or other respiratory specimens) or 2) suspected or confirmed pulmonary (noncavitary) or pleural TB and negative AFB smear results (sputum or other respiratory specimens) and a decision has been made to initiate TB treatment. A more limited initial investigation may be conducted for smear-negative cases.

Contact investigation should be conducted in a stepwise fashion that includes 1) notifying correctional management officials; 2) conducting a chart review of the source patient; 3) interviewing the source patient; 4) defining the infectious period; 5) convening the contact investigation team; 6) updating correctional management officials about the strategy, process, and action steps involved in conducting the contact investigation; 7) obtaining source case inmate traffic history (i.e., the dates and locations of the TB source patient's housing during the infectious period); 8) touring exposure sites; 9) prioritizing contacts according to duration and intensity of exposure and risk factors for becoming infected with TB and progressing to TB disease; 10) developing contact lists; 11) conducting a medical record review on each high-priority contact; 12) evaluating HIV-infected contacts promptly; 13) placing and reading initial TSTs or QFT-Gs on eligible contacts; 14) making referrals for contact evaluation (e.g., referrals to the local health department for contacts of inmates who have been released or transferred to another facility, family members, frequent visitors of the source patient); 15) calculating the infection rate and determining the need to expand the investigation; 16) placing and reading follow-up TSTs or QFT-Gs; 17) determining the infection/transmission rate from the second round of testing; and 18) writing a summary report.

Training and Education

Although the level and detail of any employee's initial TB training and education session will vary according to staff members' job responsibilities, the following components should be included for all correctional workers, regardless of job function: 1) communication regarding the basic concepts of M. tuberculosis transmission, signs, symptoms, diagnosis (including the difference between LTBI and TB disease), and prevention; 2) provision of basic information regarding the importance of following up on inmates or correctional workers demonstrating signs or symptoms of TB disease; 3) explanation of the need for initiation of AII of inmates with suspected or confirmed TB disease; 4) review of the policies and indications for discontinuing AII precautions; 5) discussion of basic principles of

treatment for TB disease and LTBI; and 6) discussion regarding TB disease in immunocompromised persons.

Correctional workers in facilities with a high risk of TB transmission should receive enhanced and more frequent training and education regarding 1) the signs and symptoms of TB disease, 2) transmission of TB disease, and 3) infection-control policies (including instruction on and location of written infection-control policies and procedures, the facility's exposure control plan, and the respiratory protection program).

State and local health department staff providing consultation or direct services to a correctional facility (including those who act as liaisons) should receive training and education regarding the unique aspects of health care and TB control in the correctional facility setting. Correctional facility administrators, contracted correctional facility health-care professionals, and health department staff should collaborate to develop an appropriate training program. Inmates should receive education from facility health-care professionals or other appropriately trained workers managing the screening or treatment process. Education and training should be appropriate in terms of the education level and language of the trainees.

Program Evaluation

Program evaluation should be performed based on the CDC framework. Successful monitoring and evaluation of a TB-prevention and -control program includes identifying collaborators, describing the TB-control program, focusing the evaluation to assess TB risk and performance, collecting and organizing data, analyzing data and forming conclusions, and using the information to improve the TB program.

Collaboration and Responsibilities

The management of TB from the time an inmate is suspected of having the disease until treatment is complete presents multiple opportunities for collaboration between correctional facilities and the public health department. Formal organizational mechanisms (e.g., designated liaisons, regular meetings, health department TB-program staff providing on-site services, and written agreements) have been demonstrated to be associated with more effective collaboration between correctional facilities and health departments.

Correctional facilities and health departments should each designate liaisons for TB-associated efforts. Liaisons should serve as a familiar and accessible communication link between collaborating entities. The duty of liaison at the correctional facility should be assigned to the person responsible for TB control or to another staff member familiar with TB control and patient management at the facility.

Correctional facilities and health departments should work together to agree on and delineate their respective roles and responsibilities. Establishing clear roles and responsibilities helps avoid duplication, confusion, the potential for breaching patient confidentiality, excess expenditures, and missed opportunities. Agreements about roles and responsibilities may be formal or informal, but they

should be recorded in writing to avoid misunderstandings and to give the agreement longevity beyond personal relationships.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

Because controlled trials are lacking for tuberculosis prevention and control activities and interventions specific to correctional and detention facilities, the recommendations have not been rated on the quality and quantity of the evidence. The recommendations reflect the expert opinion of the Working Group members with regard to best practices, based on their experience.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Effective tuberculosis prevention and control in correctional facilities is necessary to reduce tuberculosis (TB) rates and, eventually, to eliminate TB in the United States.

POTENTIAL HARMS

The combination of rifampin and pyrazinamide may cause severe liver injury and death

CONTRAINDICATIONS

CONTRAINDICATIONS

Active hepatitis and end-stage liver disease are relative contraindications to the use of isoniazid or pyrazinamide for treatment of latent tuberculosis infection (LTBI)

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- The principles of diagnosis and treatment of latent tuberculosis infection (LTBI) and tuberculosis (TB) disease discussed in this document are guidelines and are not meant to substitute for clinical experience and judgment. Medical providers not familiar with the management of LTBI and

TB disease should consult a person with expertise. All facilities' local operations procedures should include plans for consultation with and referral to persons with expertise in TB and should include criteria delineating when consultation and referral are indicated.

- Reports of severe liver injury and death associated with the combination of rifampin and pyrazinamide for treatment of latent tuberculosis infection (LTBI) prompted the American Thoracic Society (ATS) and the Centers for Disease Control (CDC) to revise previous recommendations. These recommendations now state that this regimen typically should not be offered for the treatment of LTBI. If the potential benefits substantially outweigh the demonstrated risk for severe liver injury and death associated with this regimen and the patient has no contraindications this regimen may be considered; a physician with experience treating LTBI and tuberculosis (TB) disease should be consulted before use of this regimen. Clinicians should continue the appropriate use of rifampin and pyrazinamide in standard multidrug anti-TB regimens for the treatment of TB disease.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

Implementation strategies for the various tuberculosis prevention and control practices and programs are provided in the original guideline document. In addition, the guideline provides strategies for evaluating and monitoring programs, for monitoring risk for TB transmission within institutions, and for improving the quality of programs.

IMPLEMENTATION TOOLS

Chart Documentation/Checklists/Forms
Staff Training/Competency Material

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Centers for Disease Control and Prevention (CDC), National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Prevention and control of tuberculosis in correctional and detention facilities: recommendations from CDC. MMWR Recomm Rep 2006 Jul 7;55(RR-9):1-44. [172 references] PubMed

ADAPTATION

Not applicable: Guideline was not adapted from another source.

DATE RELEASED

1996 Jun 7 (revised 2006 Jul 7)

GUIDELINE DEVELOPER(S)

Centers for Disease Control and Prevention - Federal Government Agency [U.S.]

SOURCE(S) OF FUNDING

United States Government

GUIDELINE COMMITTEE

Advisory Council for the Elimination of Tuberculosis (ACET) Ad Hoc Working Group

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

The Centers for Disease Control and Prevention (CDC), their planners, and their content experts wish to disclose they have no financial interests or other relationships with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters. Presentations will not include any discussion of the unlabeled use of a product or a product under investigational use.

ENDORSER(S)

Advisory Council for the Elimination of Tuberculosis - Independent Expert Panel
American Correctional Association - Professional Association
National Commission on Correctional Health Care

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Centers for Disease Control and Prevention, Advisory Council for the Elimination of Tuberculosis. Prevention and control of tuberculosis in correctional facilities. MMWR Recomm Rep 1997 Jun 7;45(RR-8):1-27.

GUIDELINE AVAILABILITY

Electronic copies: Available from the Centers for Disease Control and Prevention (CDC) Web site:

- HTML Format
- Portable Document Format (PDF)

Print copies: Available from the Centers for Disease Control and Prevention, MMWR, Atlanta, GA 30333. Additional copies can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325; (202) 783-3238.

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Prevention and control of tuberculosis in correctional and detention facilities: recommendations from Centers for Disease Control and Prevention (CDC). Continuing education activity. Available from the Centers for Disease Control and Prevention (CDC) Web site.
- Data collection tools. Appendix B in the original guideline document.

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on March 20, 2000. It was verified by the guideline developer on June 30, 2000. This summary was updated by ECRI on August 22, 2006.

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